# KAMPALA PRIMARY SCHOOLS'
## SKYLINE EXAMINATIONS™

## MOCK 2
### 2024

### MATHEMATICS

*Time Allowed: 2 hours 30 minutes*

Index No. □□□□□□□□□□

Candidate's Name:..........................................................................................................

Candidate's Signature:....................................................................................................

School Name:....................................................................................................................

District Name:...................................................................................................................

**DO NOT OPEN THIS BOOK LET UNTIL YOU ARE TOLD TO DO SO.**

**Read the following instructions carefully;**

1.  The paper has **two** Sections: **A** and **B**.

2.  Section A has 20 short questions ( 40 marks ).

3.  Section B has 12 questions ( 60 marks ).

4.  Attempt **ALL** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.

5.  All answers must be written using blue or black ball-point pen or ink. Only diagrams and graphs work may be done in pencil.

6.  Unnecessary alteration of work will lead to loss of marks.

7.  Any handwriting that cannot easily be read may lead to loss of marks.

8.  Do **not** fill anything in the boxes indicated for examiners' use only.

# SECTION A: 40 MARKS
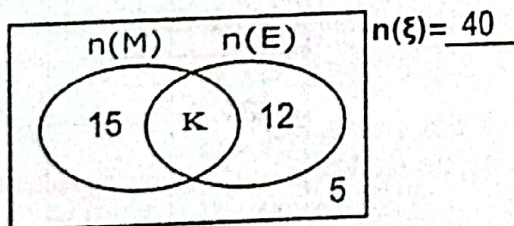
Questions **1** to **20** carry <u>two</u> marks each.

1. Work out: 420 + 58

2. Write in figures: Four hundred forty two thousand.
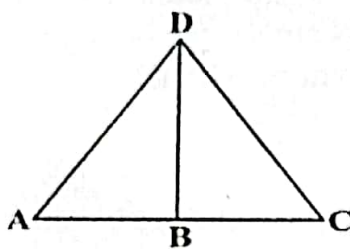
3. Simplify: $4p - 4q - 3p + 3q$

4. If today is Tuesday, what day of the week will it be after 81 days from today?

5. Use the Venn diagram below to find the value of **K**.

$n(\xi) = \underline{40}$

$n(M)$   $n(E)$

15   K   12

5

6. The time is 9:20a.m. What time will it be after ten hours on the 24-hour clock system?

7. In the triangle ACD, Angle ADC = 76⁰, Angle ACD = 68⁰ and angle ADB = 40⁰. Find the size of angles:

$$\text{Angle } ADC = 76^0, \quad \text{Angle } ACD = 68^0, \quad \text{angle } ADB = 40^0$$

(Diagram: triangle with apex D at top, base A—B—C, with D connected to A, B, and C)

(a) ABD

(b) DAC

8. In Bembe Primary School, there are 600 pupils, if there are 240 boys in the school. What is the ratio of girls to boys in the school?

9. The probability of a football team winning a game is three fifth. If the team plays 30 games, find the number of games the team is expected to win.

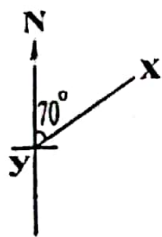10. (a) Find the range of the following numbers:

4, 7, 5, 1, 3, 9, 2, 6, 8, 0

(b) Work out: $^-4 + {}^+9$

CamScanner

11. Four pupils Musa, Denis, Alima and Agnes have their average height as 120cm. The height of Musa and Denis are 100cm and 130cm respectively. If Denis is as tall as Agnes. What is the height of Alima?

12. Round off 299.97 to one place of decimal.

13. Ssozi sold his radio at Shs.50,000/= making a loss of Shs.15,500/=. Calculate the cost price of the radio.

14. Use the diagram to find the bearing of y from x.



15. Mudecha paid Shs.36,000/= for a shirt which was priced Shs.50,000/=. Find the percentage discount on the shirt.

16. A businessman banked Shs.5Million in Bank of Baroda. If he banked it in 20,000/= shilling notes only, find the number of notes he banked.

17. Find the square root of $1\dfrac{7}{9}$

18. Workout: $\dfrac{2}{5} - \dfrac{3}{4} + \dfrac{3}{8} =$
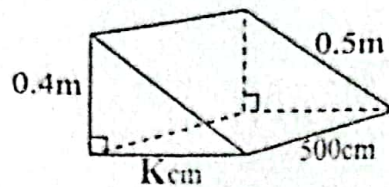
19. (a) Find the next number in the sequence:

    81, 64, 49, 36, 25, _____

    (b) Find the Highest Common Factor (HCF) of 18 and 12.

20. In a school there are 200 pupils. The probability that a girl is picked at random is $\frac{3}{8}$. How many boys are in the school?

21. The solid figure below represents a water tank. Use it to answer the questions that follow.



(a) Find the value of K in cm. (3 marks)

(b) What is the capacity of the above tank? (2 marks)

22. Juma and his wife own 360 hectares of land. Debbo takes 8 weeks to dig that land and his wife takes 12 weeks to dig the same land.
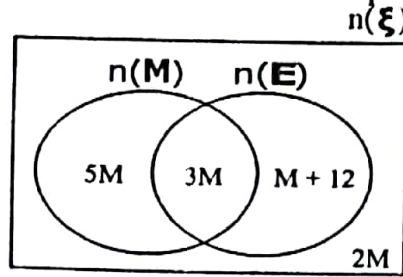
(a) Find the length of time the two people take to dig the land if they decide to work together at the same time. (3 marks)

(b) Calculate the size of land the two people dig in one week. (2 marks)

23. The Venn diagram below shows different subjects liked by the different pupils in the P.7 class. Study it and use it to answer the questions that follow.

$$n(\xi)$$



(a) Given that the number of pupils who like Mathematics is the same as the pupils who like English, calculate the value of **M**. (3 marks)
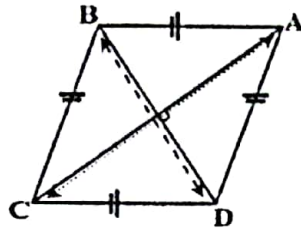
(b) Find the number of pupils who don't like Mathematics. (2 marks)

24. (a) Given that m = 2n − 1, find the value of n if m = 5. (2 marks)

(b) A father is 48 years old and his daughter Keno is 17 years old. At what age will the father be twice the age of his daughter Keno? (2 marks)

(c) After spending 40% of her income, Jamila was left with Shs.27,000/=. How much did she spend? (2 marks)

**25.** Study the given quadrilateral **ABCD** and use it to answer the questions that follow.



If its perimeter is 80dm and diagonal **BD** = 24dm;

(a) Find the length of diagonal **AC**. (3 marks)

(b) Calculate the area of the quadrilateral in dm$^2$. (2 marks)

**26.** YY Coaches bus left Kampala for Bweyale town with **60** passengers. At Wobulenzi town 15 got out, at Nakasongola 8 boarded and at Kigumba 14 got out. It then travelled straight to Bweyale town and the rest of the passengers got out.

(a) How many passengers reached Bweyale town? (2 marks)

(b) How much money was collected from those who reached Kigumba from Kampala if each paid Shs.25,000/=. (2 marks)

27. (a) With the help of a ruler, a pencil and a pair of compasses _only_, construct a quadrilateral **PQRS** in which **PQ** = 4.8cm, **QR** = 3.6cm and **PS** = 3.2cm, angle **P** = 60⁰ and angle **Q** = 90⁰.

(4 marks)

(b) Measure the length of line **SR**.

(1 mark)

28. A trader has different amounts of money in the following currencies:

**500 United States dollars (US $)**
**7,200 Kenya Shillings (K.Shs)**
**600 United Kingdom Pounds (UK £)**
**800,000 Uganda Shillings (Ug.Shs.)**

Given that the existing exchange rates are:

(b) If a Television costs K.Shs.72,000/=. Find how many US Dollars the trader would pay for the Television. (2 marks)
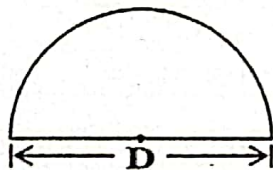
29. (a) Work out: $\dfrac{7.2 \times 0.48}{1.2 \times 0.8}$ (3 marks)

(b) Solve: $n + \frac{3}{4}n = 14$ (2 marks)

30. Study the figure below and use it to answer the questions that follow.



(a) The distance around the given figure is 44dm. Work out the value of D. (2 marks)

(b) Calculate the area of the above figure. (2 marks)

31. The table below is for flights of Air bus number QU 312 Uganda Airlines.

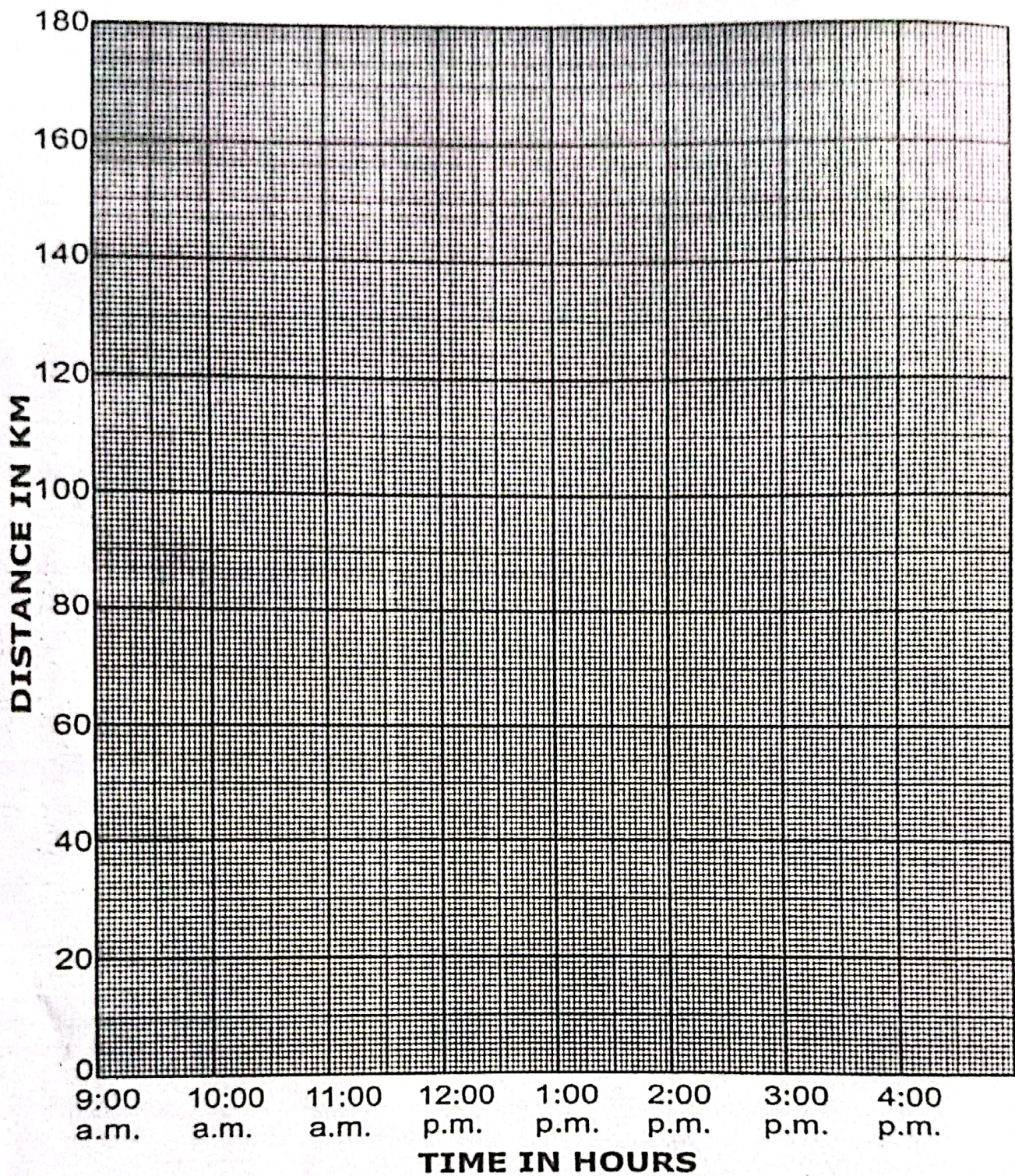| TOWN AIRPORT | ARRIVAL TIME | DEPARTURE TIME |
|---|---|---|
| ENTEBBE | | 06 00 HOURS |
| KHARTOUM | 08 40 HOURS | 09 15 HOURS |
| ABUJA | 10 00 HOURS | 10 30 HOURS |
| LONDON | 14 45 HOURS | 15 00 HOURS |
| NAIROBI | 18 00 HOURS | |

(a) Write the arrival time of the Air bus plane in London in 12-hour clock system.
(1 mark)

(b) How long did the plane take on the way from Abuja to London? (2 marks)

(c) For how long did the Air bus plane stop on the way between Entebbe and Nairobi? (2 marks)

32. Labujje left town **X** at 9:00a.m. and drove 60Km per hour for 2hours to town **Y**. He rested for one hour at town **Y**. He left town **Y** and drove for 1½ hours at 40km per hour to town **Z**. He then left town **Z** and drove back to town **X** at 60Km per hour.

(a) Draw Labujje's journey on the graph given on page 12. (3 marks)

(b) Find the average speed of Labujje for the whole journey. (2 marks)